



February 25, 1999

*RECEIVED**MAR 02 1999*

*Office of Water Resources
Engineering Branch*

Chief, Office of Water Resources, DEP
 ATTN: Jessica Welsh, Public Information Specialist
 1201 Greenbrier Street
 Charleston, WV 25311-1088

RE: Permit Application No. WV0114618

Dear Sir:

Inco Alloys International, Inc. is pleased to submit comment on our draft National Pollutant Discharge Elimination System Water Pollution Control Permit. Please consider the following information and data for the purpose of amending the draft permit.

Comments Regarding Discharge Limitation and Monitoring Requirements for Storm Runoff from Outlet Numbers 001 and 002.

The draft permit proposes monitoring for Chemical Oxygen Demand (COD) and Biological Oxygen Demand (BOD) because past monitoring indicated elevated COD and BOD levels. The enclosed stormwater summary table of DMR storm data verifies only one BOD analysis above the benchmark value for BOD and only two analysis above the COD benchmark value. Inco Alloys International, Inc. does not process nor store materials outside the facility that have the potential for stormwater wash-off as BOD and COD pollutants. The benefit of additional BOD and COD pollutant information does not warrant the additional cost of the analysis. Inco Alloys respectfully request the elimination of these monitoring requirements due to the unnecessary additional expense.

The draft permit proposes limits for fluoride at 1.4 (mg/l) average and 2.8 (mg/l) maximum and limits for copper at 23 (ug/l) average and 46 (ug/l) maximum. These limits are based on Pats Branch listing in the West Virginia Office of Water Resources 303(d) list of water quality impaired streams due to fluoride and copper stream sampling results over the past five years. Please refer to the enclosed stream sample data tables and graphs. This data does not indicate definitive evidence that the stream is polluted above the water quality standard criteria. Since December 1995, there have been no sample results above the limits. Stream sample analysis prior to December 1995 did show higher readings, but this time period coincides with the operation and closing of the Dietz Hollow landfill area. The landfill contributes to Pats Branch original run-off source. Additional sampling information shall be provided to DEP personnel over the next several months to provide additional data points in support of removing Pats Branch from the 1999 revised 303(d) list.

INCO ALLOYS INTERNATIONAL, INC.
 3200 Riverside Drive
 Huntington, West Virginia 25705-1771

INCONEL® INCOLOY® MONEL® NIMONIC® NILOO® BRIGHTRAY®

note:
 copy faxed to
 Dave Chaney 3-5-9

In addition, the IWC formula should not be implemented towards excluding the mixing zone factor in the calculation of pollution discharge limits. Pats Branch is not an intermittent stream. The stream receives sufficient ground water supply to maintain flow during summer drought seasons; therefore, the 10-year/7-day low flow is not zero. INCO is directly adjacent to and a part of the Guyandotte District. Due to the close vicinity of the facility to the District, it is not feasible for a storm to only affect this facility and not affect the adjacent Guyandotte District property that contributes to Pats Branch. Inco Alloys respectfully request implementing a mixing zone factor in the calculation of the discharge limits due to the above comments.

Comments Regarding Monitoring Well Requirements.

The draft permit proposes a nickel limit of as 42 ($\mu\text{g/l}$) for monitoring well 1-A. The Groundwater Standard (47 CSR 12-3 Appendix A) limit for nickel is 100 ($\mu\text{g/l}$). Please refer to the enclosed data table and graph for monitoring well 1-A nickel data. The mean background nickel value is 53 ($\mu\text{g/l}$) and 102 ($\mu\text{g/l}$) is the value three standard deviations from the mean. Three standard deviations is a widely accepted statistical method of detecting a deviation from an acceptable numeric range. Therefore Inco Alloys respectfully request the limit for nickel be adjusted to 100 ($\mu\text{g/l}$), the groundwater standard value.

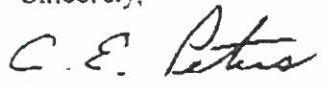
The draft permit proposes a chromium limit of 54 (mg/l) for monitoring well 3-A. The Groundwater Standard (47 CSR 12-3 Appendix A) limit for total chromium is 100 ($\mu\text{g/l}$). Please refer to the enclosed data table and graph for monitoring well 3-A chromium data. The mean background chromium value is 28 $\mu\text{g/l}$ and 80 ($\mu\text{g/l}$) is the value three standard deviations from the mean. Therefore Inco Alloys respectfully request the limit for total chromium be adjusted to at least 80 ($\mu\text{g/l}$), a value still lower than the groundwater standard value of 100 ($\mu\text{g/l}$).

Comments Regarding Annual Slug Testing

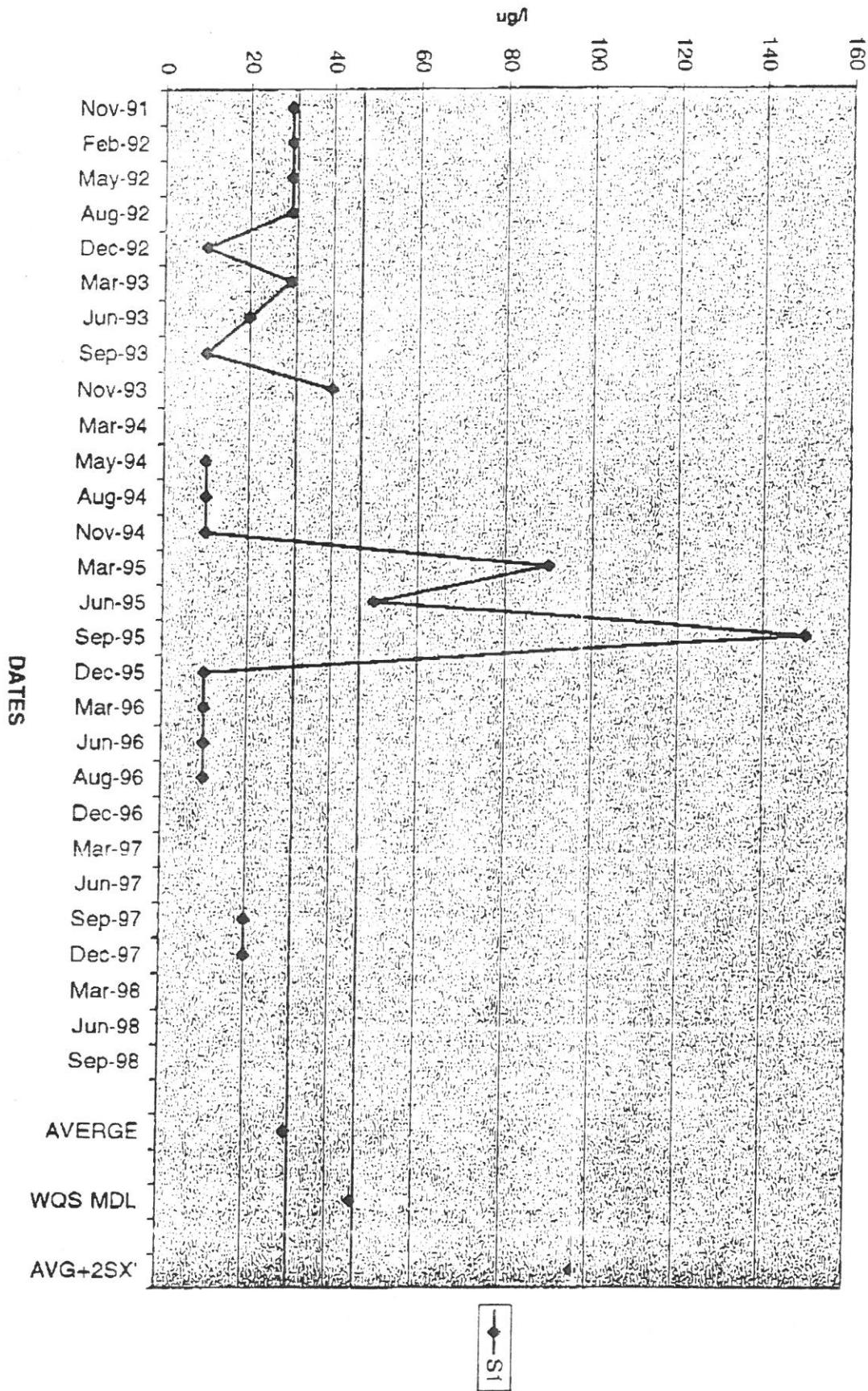
Professional geologists employed for the purpose of slug testing our up-gradient well have expressed that a properly installed well such as ours, should give similar results with each slug test. Our monitoring wells had been approved by the state DEP during a previous permitting period. Inco Alloys respectfully request discontinuing the annual slug test requirement.

Please give careful consideration to the above comments. If you have any questions regarding this matter please contact me at (304) 526-5688.

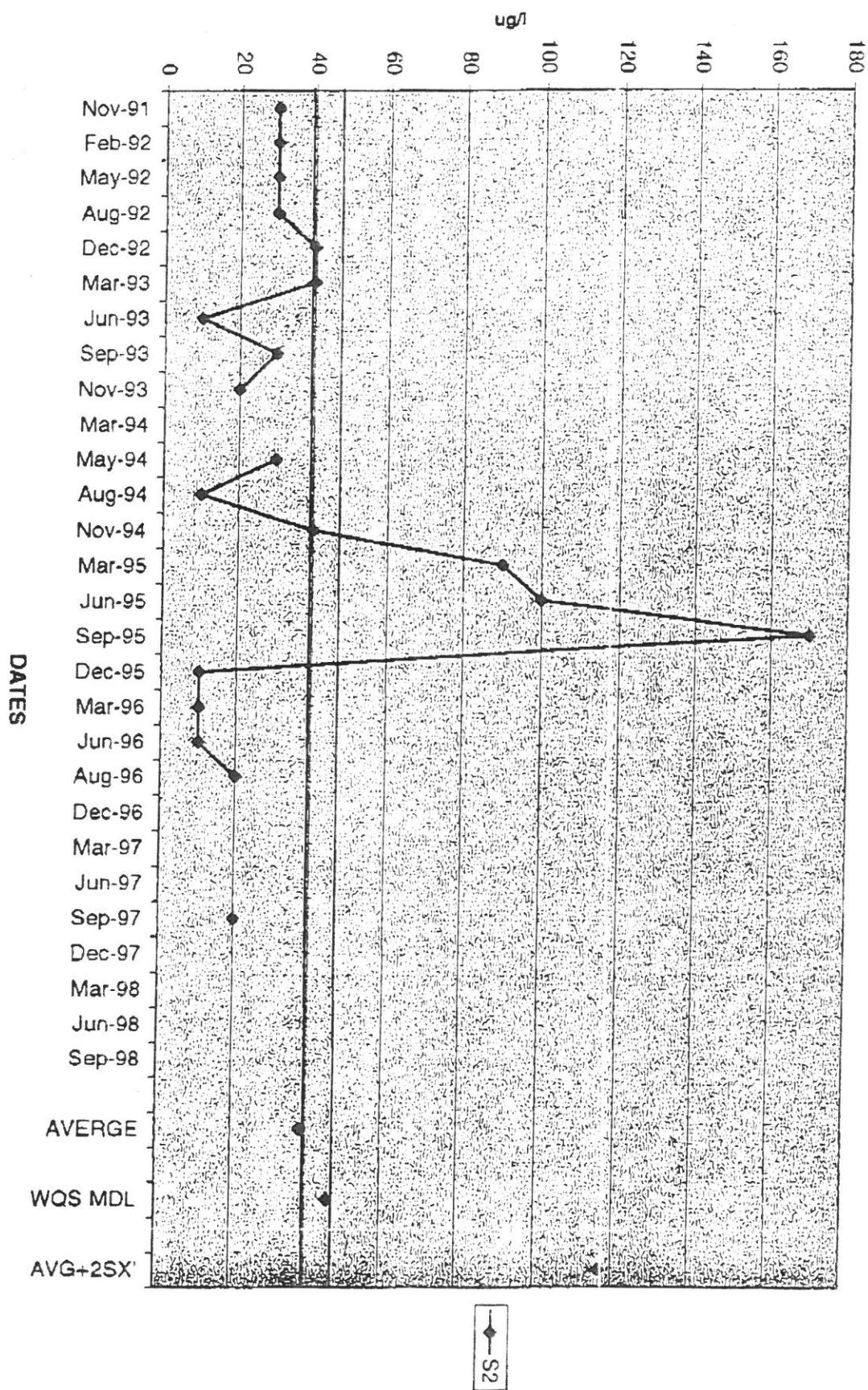
Sincerely,


C. E. Peters
Safety, Health &
Environmental Engineer

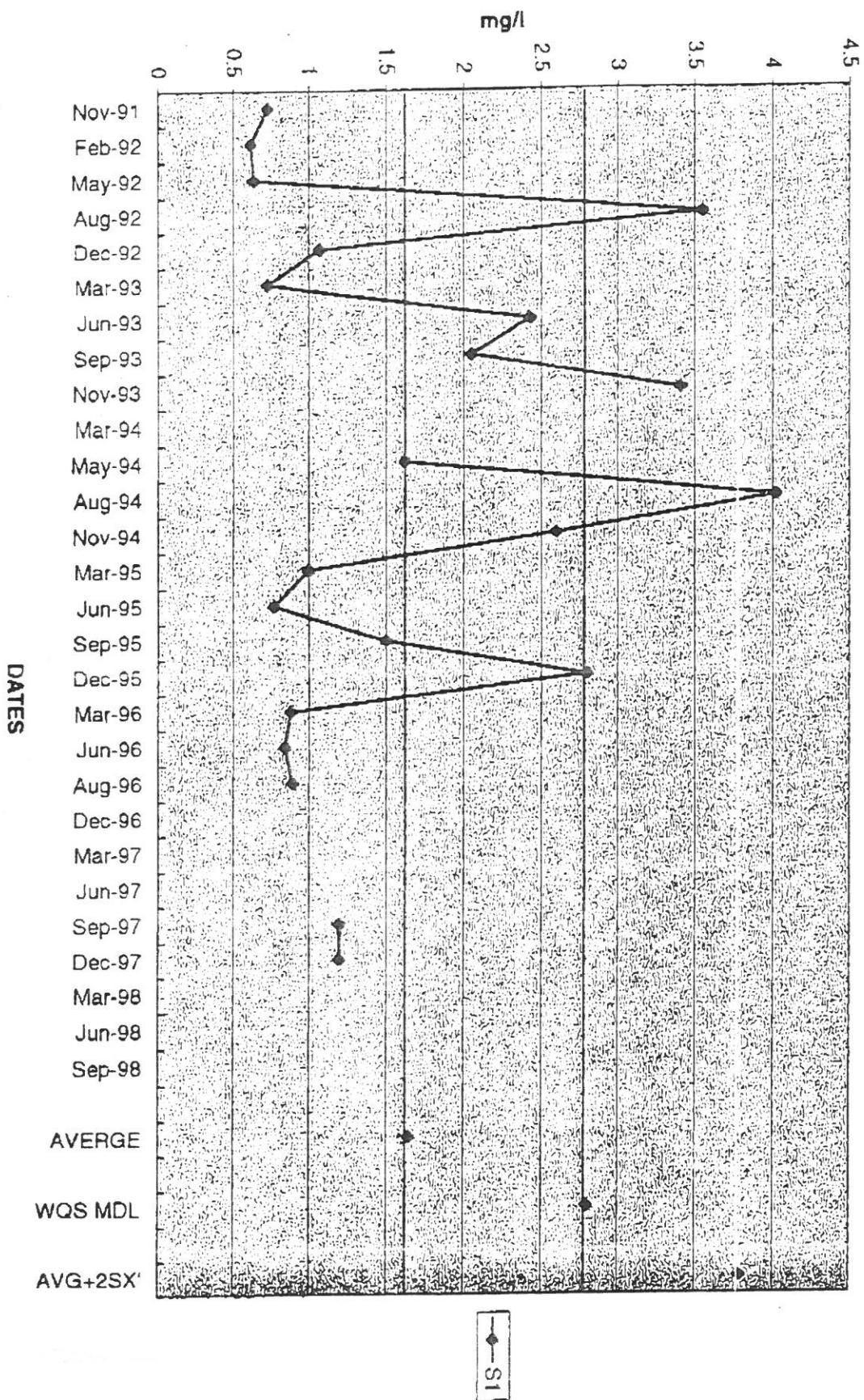
S1 - COPPER DATA



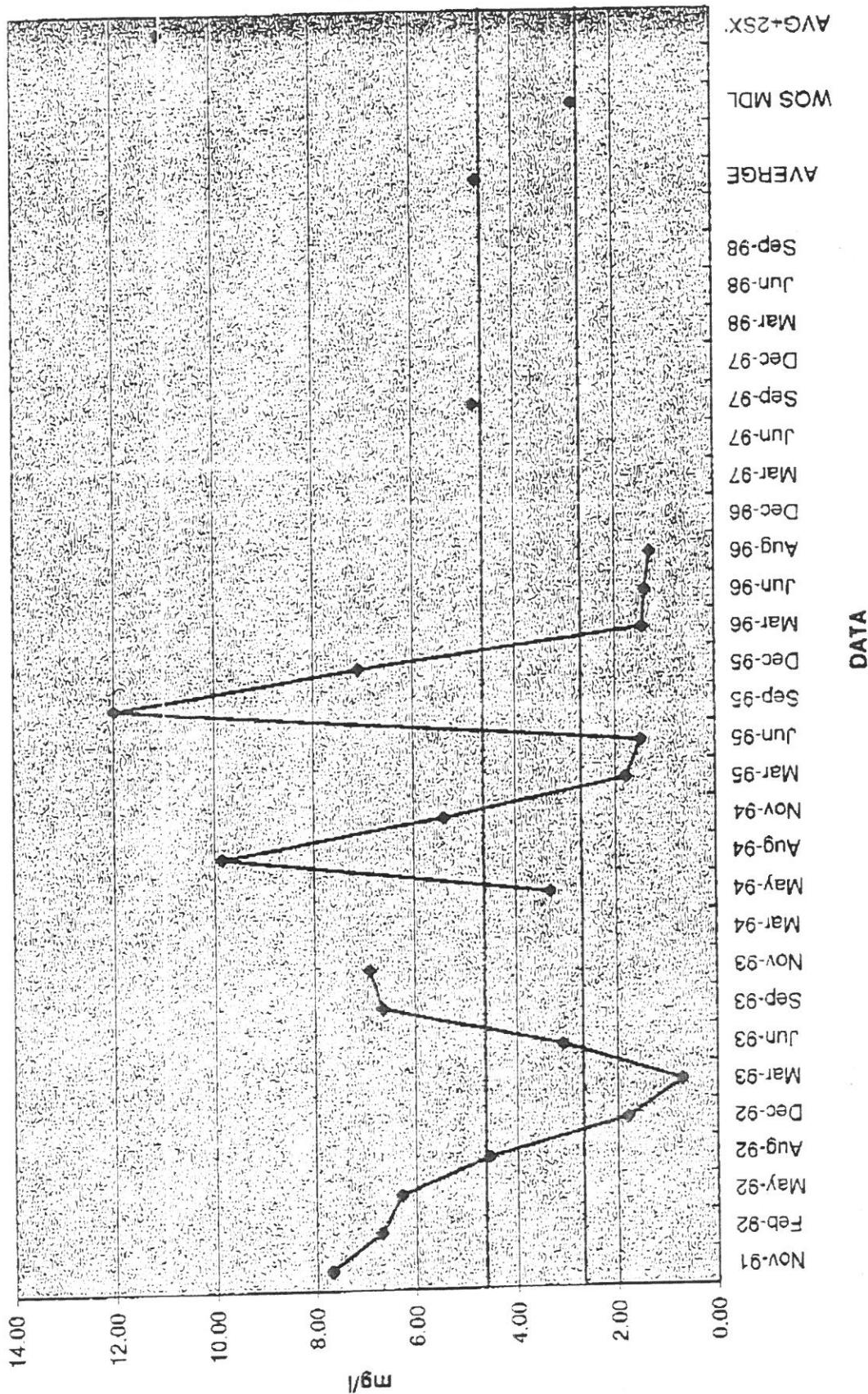
S2 - COPPER DATA



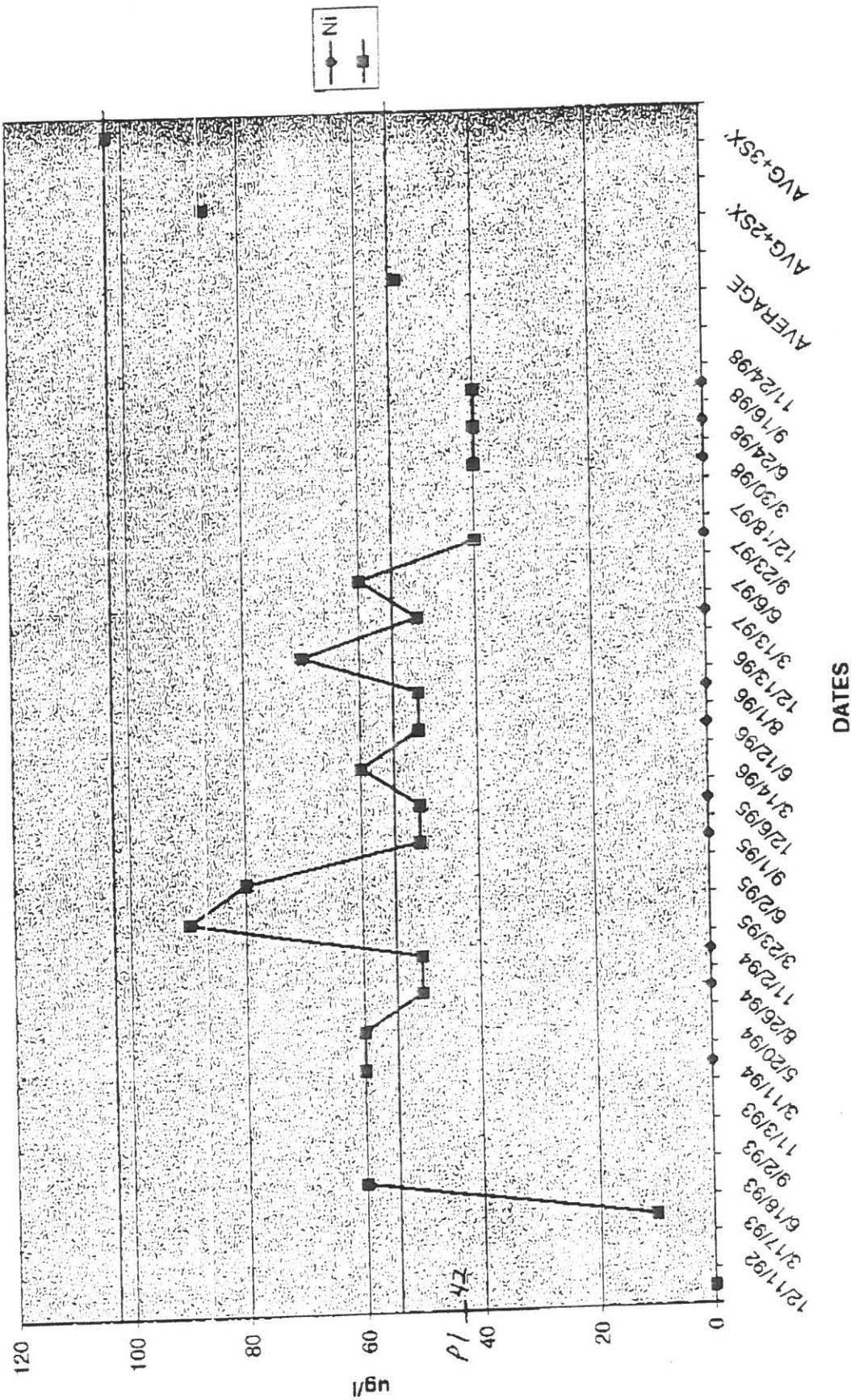
S1 - FLUORIDE DATA



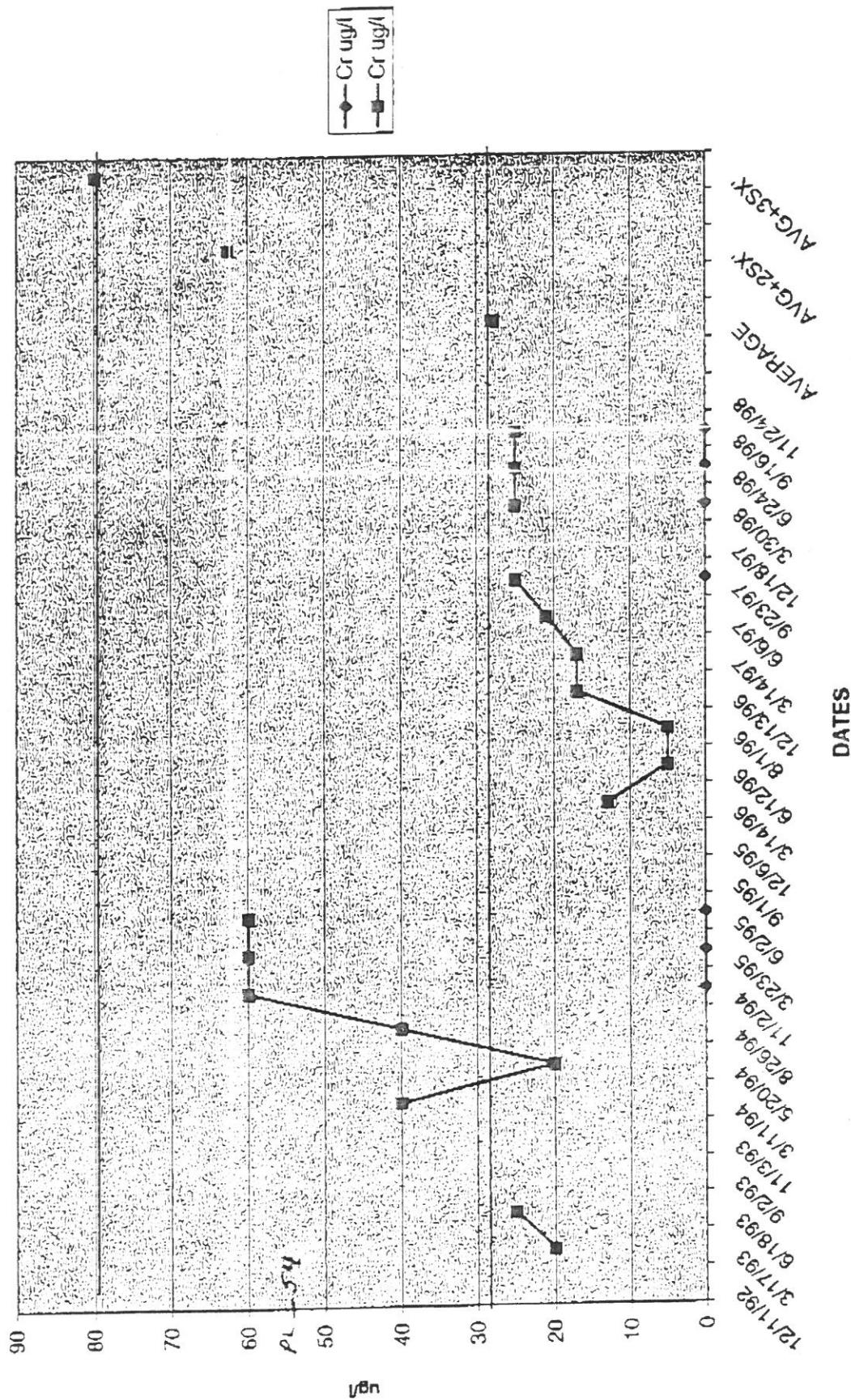
S2 - FLUORIDE DATA



Groundwater Monitoring Well #1-A - NICKEL DATA



Groundwater Monitoring Well #3-A TOTAL CHROME DATA



INCO ALLOYS - 001 STORMWATER OUTFALL DATA

INCO ALLOYS, Pats Branch Data

Date:	Fluoride mg/l		Copper ug/l		Hardness mg/l		Flow CFM	
	S1	S2	S1	S2	S1	S2		
Nov-91	0.73	7.70	<	30	30	415	300	0.80
Feb-92	0.62	6.70	<	30	30	318	268	26.5
May-92	0.64	6.30	<	30	30	175	155	2.67
Aug-92	3.55	4.55	<	30	30	311	305	2.0
Dec-92	1.07	1.80		10	40	235	190	20.0
Mar-93	0.73	0.71		30	40	150	165	200.5
Jun-93	2.43	3.09		20	10	275	235	10.0
Sep-93	2.05	6.65		10	30	310	215	0.67
Nov-93	3.41	6.9		40	20	310	285	1.6
Mar-94			BACK			WATER NO SAMPLE		
May-94	1.62	3.32	<	10	30	295	268	8.0
Aug-94	4.02	9.85	<	10	10	500	400	1.3
Nov-94	2.6	5.4		10	40	342	302	1.0
Mar-95	1.0	1.8		90	90	190	182	3.3
Jun-95	0.77	1.5		50	100	240	255	33.4
Sep-95	1.5	12		150	170	270	190	0.13
Dec-95	2.8	7.1	<	10	10	310	275	0.8
Mar-96	0.88	1.45	<	10	10	200	140	3.5
Jun-96	0.84	1.4		10	10	212	225	9.4
Aug-96	0.89	1.3		10	20	230	225	10.7
Dec-96			BACK			WATER NO SAMPLE		
Mar-97			BACK			WATER NO SAMPLE		
Jun-97			BACK			WATER NO SAMPLE		
Sep-97	1.2	4.8	<	20	20	260	240	1.0
Dec-97	1.2		BACK <	20		310		1.0
Mar-98			BACK			WATER NO SAMPLE		
Jun-98			BACK			WATER NO SAMPLE		
Sep-98			BACK			WATER NO SAMPLE		
AVERAGE	1.645238	4.716		30.0	38.5	278.95238	241.0	16.1081
WQS MDL	2.8	2.8		46	46			
AVG+2SX'	3.784375	11.05355		96.9328	116.979	440.4299	366.325681	102.5711
STD(X)	1.069568	3.168774		33.4664	39.23948	80.738762	62.6628405	43.23152

INCO ALLOYS INTERNATIONAL, INC.
Tailings Pond Groundwater Monitoring
Monitoring Well # 1A

Date	pH	Temp. F	Alk. mg/l	TDS mg/l	TSS mg/l	Cond Umhos	COD mg/l	Fl mg/l	Ca mg/l	Ni ug/l	Cu ug/l	Cr ug/l	Cr+6 ug/l	Fe ug/l
12/11/92	Well	Dry												
3/17/93	6.34	54	55	408	102	255	36	0.1	22.7	10	20	<	10	< 20
6/18/93	7.17	66	70	322	556	532	44	0.22	25.4	60	50	<	80	< 20
9/2/93	Well	Dry												
11/3/93	Well	Dry												
3/11/94	5.88	51	55	250	30	381	6	0.10	20	< 60	< 10	2	< 10	620
5/20/94	5.83	59	80	372	14	567	3	< 0.10	29.2	> 60	< 10	10	< 10	780
8/26/94	6.56	67	128	502	346	694	5	0.15	26	< 50	20	< 20	< 20	2,410
11/2/94	6.85	64	105	354	288	780	22	0.21	37	< 50	< 10	< 60	< 20	3,120
3/23/95	6.2	58	80	324	77	555	4	< 0.1	23.36	90	50	< 60	< 20	1,130
6/2/95	6.34	63	85	310	13	564	< 1	0.16	18.9	80	20	< 60	< 20	1,280
9/1/95	6.59	68	90	342	354	684	17	0.12	20.9	< 50	140	< 60	< 20	1,230
12/6/95	6.66	58	85	308	190	670	24	0.28	17.8	< 50	20	13	< 20	4,900
3/14/96	6.5	60	125	348	74	864	86	0.13	20.4	60	< 10	1	< 20	800
6/12/96	5.64	66	65	294	32	568	< 1	< 0.1	16	< 50	< 10	< 1	< 20	1,080
8/1/96	6.01	66	92	336	13	707	< 1	0.17	19	< 50	< 10	< 1	< 20	1,020
12/13/96	6.51	57	139	394	38	692	23	0.12	34.4	70	20	2	< 20	1,180
3/13/97	7.2	57.4	0	280	35	415	14	0.16	13.9	< 50	< 10	2	< 20	1,760
6/6/97	6.5	58.5	0	364	50	612	10	0.23	35.9	60	20	4	< 20	1,100
9/23/97	6.4	62.8	100	360	48	580	< 10	0.17	24	< 40	< 20	< 25	< 10	2,200
12/16/97	Well	Dry												
3/30/98	6.6	60.8	130	350	170	463	< 10	0.09	27	< 40	< 20	< 25	< 10	1,600
6/24/98	6	58.8	110	320	50	567	< 10	0.08	23	< 40	< 20	< 25	< 10	2,500
9/16/98	6.6	64.2	110	380	100	524	< 10	0.18	26	< 40	< 20	< 25	< 10	1,100
11/24/98	Well	Dry												
AVERAGE	6.419	60.975	85.2	345.9	129	583.7	16.85	0.1485	24.043	53	25.5	24.3	17	2902.5
AVG+2SX'	7.240011	70.13507	160.9603	452.3131	424.0582	864.6511	56.88301	0.257905	36.7076	86.15038	84.0707	75.1666	26.40325	13052.74
AVG+3SX'	7.650516	74.7151	198.8404	505.5196	571.5874	1005.127	76.89952	0.312608	43.0399	102.7256	113.356	100.5999	31.10487	18127.85

INCO ALLOYS INTERNATIONAL, INC.
Tailings Pond Groundwater Monitoring
Monitoring Well #2A

Date	pH	Temp F	Alk. mg/l	TDS mg/l	TSS mg/l	Cond Umhos	COD mg/l	Fl mg/l	Ca mg/l	Ni ug/l	Cu ug/l	Cr ug/l	Cr+6 ug/l	Fe ug/l
12/11/92	5.35	57	15	2,284	2,510	196	247	0.12	0.31	150	94	< 10	< 20	64,600
3/17/93	5.2	54	25	190	87	141	24	0.08	31.8	60	20	< 10	< 20	2,050
6/18/93	5.43	64	20	169	270	285	18	0.1	7.3	70	10	< 24	< 20	6,800
9/2/93	5.08	69	20	428	1,084	264	35	0.13	6.2	30	40	< 10	< 20	14,300
11/3/93	5.02	60	45	188	830	261	40	0.16	0.94	< 60	< 60	< 10	< 10	48,320
3/11/94	5.4	54	15	414	1,575	260	30	0.09	11.7	80	50	< 50	< 10	38,400
5/20/94	5.07	59	20	290	464	260	3	< 0.1	8.8	150	< 10	< 30	< 10	7,720.20
8/26/94	4.96	67	42	274	1,965	271	11	< 0.1	5	80	< 50	< 40	< 10	6,850
11/2/94	5.03	64	18	272	1,770	267	36	0.78	3.01	80	< 10	< 60	< 20	4,540
3/23/95	5.5	53	30	252	1,005	255	32	< 0.1	8.22	110	60	< 60	< 20	10,700
6/2/95	5.47	61	40	220	624	275	6	0.1	4.72	50	30	< 60	< 20	8,040
9/1/95	5.06	71.1	230	352	88	343	102	0.13	11.2	< 50	230	< 60	< 20	10,840
12/6/95	5.23	55	65	498	1,369	350	74	0.13	8.7	80	< 20	< 15	< 20	2,570
3/14/96	5.65	60	75	360	674	350	38	< 0.1	5.5	100	< 10	< 6	< 20	2,760
6/12/96	5.18	63	40	254	568	341	46	< 0.1	6.7	< 50	< 10	< 1	< 20	1,280
8/1/96	5.15	61	12	186	767	309	50	< 0.1	4.9	80	10	< 1	< 20	2,630
12/13/96	5.48	58	12	244	1,840	253	43	0.1	7.7	140	30	< 17	< 20	1,770
3/13/97	6.86	57.3	25	356	2,610	236	29	0.12	6.7	120	50	< 36	< 20	28,200
6/6/97	6.2	58.5	0	276	229	216	127	0.13	9.6	220	120	< 107	< 20	84,000
9/23/97	5.17	59.5	13	370	5,100	260	< 10	0.11	15	110	54	< 25	< 10	6,000
12/18/97	5.2	58.1	12	210	4,700	246	32	0.24	120	180	95	< 96	< 10	66,000
3/30/98	5.3	60.4	13	220	10,000	208	< 10	0.07	11	110	42	< 26	< 10	16,000
6/24/98	5.3	58.5	13	200	3,200	255	< 10	0.07	13	< 40*	96	< 40	< 10	33,000
9/16/98	4.8	59.7	12	280	5,900	252	< 10	0.08	13	< 40*	180	< 60	< 10	50,000
11/24/98	5.2	60.4	11	280	4,300	250	< 10	0.06	10	< 40*	< 20	< 25	< 10	880
AVERAGE	5.3316	60.1	32.92	362.68	2141.16	264.16	42.92	0.136	13.24	98.18182	56.04	35.16	16	20734.01
AVG+2SX	6.171871	68.96961	122.3383	1180.925	6793.347	361.2745	146.4814	0.413489	59.3203	192.3218	166.2254	91.59486	26	69091.83
AVG+3SX	6.592007	73.40442	167.0475	1590.048	9119.44	409.8318	198.2622	0.552233	82.36046	239.3918	221.3181	119.8123	31	93270.74

INCO ALLOYS INTERNATIONAL, INC.
Tailings Pond Groundwater Monitoring
Monitoring Well #3A

Date	pH	Temp. F	Alk. mg/l	TDS mg/l	TSS mg/l	Cond. Umhos	COD mg/l	Fl mg/l	Ca mg/l	Ni ug/l	Cu ug/l	Cr ug/l	Cr+6 ug/l	Fe ug/l
12/11/92	Dry	Well												
3/17/93	6.39	54	50	308	256	219	23	0.07	3.11	60	30	20	<	20
6/18/93	7	64	55	264	164	429	38	0.16	25	50	20	25	<	20
9/2/93	Dry	Well												
11/3/93	Dry	Well												
3/11/94	5.78	59	68	300	239	478	3	0.12	38	<	60	30	40	< 10
5/20/94	5.46	63	65	324	154	440	3	<	0.1	34.7	110	10	20	< 10
8/26/94	5.99	73	148	508	390	501	8	0.17	33.2	<	50	20	40	< 20
11/2/94	7.09	64	190	408	209	604	**	**	1.21	<	50	<	10	< 20
3/23/95	6.15	58	80	300	780	465	4	<	0.1	35.04	110	60	<	20
8/2/95	6.07	62.8	90	272	206	427	< 1	<	0.1	34.8	<	50	20	< 20
9/1/95	Dry	Well												
12/6/95	Dry	Well												
3/14/96	5.28	59	85	482	12	336	62	<	0.1	23.9	<	10	13	< 20
6/12/96	5.56	69	80	334	797	542	69	0.1	36.3	<	50	20	5	< 20
8/1/96	5.6	62	60	268	620	514	50	0.11	20	70	10	5	<	20
12/13/96	6.17	55	132	340	826	491	43	0.16	38	70	20	17	<	20
3/14/97	6.98	58.8	0	264	385	363	14	0.12	20.3	80	20	17	<	20
6/6/97	6.24	59.2	0	330	504	440	51	0.2	46.2	130	40	21	<	20
9/23/97	6.25	59.4	200	380	110	615	< 10	0.29	47	<	40	<	25	< 10
12/18/97	Well	Dry												
3/30/98	6	60.3	140	330	700	412	< 10	0.17	40	59	29	<	25	< 10
6/24/98	5.8	59.9	90	300	350	441	< 10	0.25	31	44	22	<	25	< 10
9/16/98	5.9	60.8	210	400	230	588	< 10	0.4	51	< 40	<	20	<	25
11/24/98	Dry	Well												
AVERAGE	6.095	61.17778	96.83333	339.5556	385.1111	461.3889	24.05882	0.16	31.04222	67.38889	22.83333	27.94444	16.66667	10433.33
AVG+2SX*	7.132718	70.22733	220.0706	481.7108	901.22	656.7	69.83803	0.330441	58.18275	120.4688	47.28256	62.60904	26.36809	21105.61
AVG+3SX*	7.651577	74.7521	281.6892	552.7884	1159.274	754.3555	92.72763	0.415661	71.75302	147.0088	59.50717	79.94133	31.2188	26441.75

INCO ALLOYS INTERNATIONAL, INC.
Tailings Pond Groundwater Monitoring
Monitoring Well #4A

Date	pH	Temp. F	Alk. mg/l	TDS mg/l	TSS mg/l	Cond Umhos	COD mg/l	Fl mg/l	Ca mg/l	Ni ug/l	Cu ug/l	Cr ug/l	Cr+6 ug/l	Fe ug/l
12/11/92	6.29	56	110	416	236	387	270	1.84	0.39	60	60	10	< 20	56,800
3/17/93	6.52	58	100	474	1,620	336	30	1.93	6.3	80	60	50	< 20	37,440
6/18/93	6.58	65	160	354	1,220	511	26	1.64	11.4	130	60	110	< 20	39,760
9/2/93	6.41	63	85	142	131	473	11	1.77	3.42	90	20	12	< 20	5,940
11/3/93	6.72	59	85	324	170	478	2	1.83	0.68	< 60	40	< 10	< 10	8,580
3/11/94	6.58	57	110	324	56	575	14	2.05	8.9	120	80	20	< 10	3,970
5/20/94	6.33	62	140	344	44	567	8	1.51	7.5	110	10	20	< 10	3,000
8/26/94	8.08	66	160	352	75	470	17	1.16	2.6	< 50	20	30	< 20	9,450
11/2/94	6.25	65	48	240	45	467	13	1.28	2.07	< 50	< 10	< 60	< 20	1,840
3/23/95	6.5	58	85	306	44	500	7	1.3	5.13	< 50	70	< 60	< 20	5,480
6/2/95	6.69	62.4	170	278	45	486	< 1	1.3	2.95	< 50	30	< 80	< 20	5,250
9/1/95	5.64	69.1	430	286	20	577	74	1.1	4.79	< 50	110	< 60	< 20	3,520
12/8/95	6.4	57	430	234	32	638	14	1.4	4.5	< 50	< 10	7	< 20	1,100
3/14/96	6.42	62	200	326	6	627	14	1.1	3.6	70	10	7	< 20	2,420
6/12/96	6.34	63	220	368	72	778	23	1.5	5.8	< 50	20	< 1	< 20	3,150
8/1/96	6.15	61	130	324	48	624	26	0.83	2.7	< 50	< 10	2	< 20	3,050
12/13/96	6.47	57	148	327	142	510	4	0.98	4.6	90	20	13	< 20	3,860
3/14/97	7.51	58.6	0	336	52	547	16	1.8	5.1	60	10	7	< 20	3,120
6/6/97	6.56	58.5	0	264	28	424	10	1	4.4	70	30	5	< 20	2,830
9/23/97	6.25	59.4	200	380	110	615	< 10	0.29	47	< 40	< 20	< 25	< 10	4,100
12/18/97	6.37	58.8	130	270	18	403	< 10	1.1	5.1	< 40	< 20	< 25	< 10	2,100
3/30/98	6.6	61.2	140	290	25	398	11	1.5	5.1	< 40	< 20	< 25	< 10	2,200
6/24/98	6.3	59.2	160	270	24	522	< 10	1.4	5.4	< 40	< 20	< 25	< 10	2,600
9/16/98	6.1	60.2	120	280	23	444	11	1.1	5.2	< 40	< 20	< 25	< 10	2,700
11/24/98	6.1	60.2	110	320	40	450	< 10	1.2	< 0.2	< 40	< 20	< 25	< 10	< 200
AVERAGE	6.4064	60.664	146.84	313.16	173.04	512.28	25.68	1.3564	6.1932	63.2	32	27.76	16.4	8498.4
AVG+2SX	7.061734	67.12823	348.6788	442.2874	940.18	708.2957	131.3283	2.15289	23.92014	115.392	84.59911	79.19695	26.19796	36689.35
AVG+3SX	7.389401	70.36034	449.5982	506.8511	1323.75	806.3036	184.1525	2.551135	32.78361	141.4879	110.8987	104.9154	31.09694	50784.82